Listing of Claims:

5

- 1. (Currently Amended) A reformer comprising:
- a micro reactor comprising a flow path for a fluid; and
- a sealed container which accommodates the micro reactor and keeps an atmosphere on a periphery of the micro reactor at a pressure of not more than 1 Pa while the reformer is operated; and

an inlet pipe and an outlet pipe which are connected to the flow path of the micro reactor, and which extend outward from the container and are sealed to the container.

2. (Previously Presented) The reformer according to claim 1, further comprising:

adsorption means for adsorbing a medium which is present inside the container and which propagates heat.

Claim 3 (Canceled).

4. (Original) The reformer according to claim 1, further comprising:

heating means for generating heat to heat the micro reactor.

5

- 5. (Previously Presented) The reformer according to claim 1, wherein the reformer is manufactured by accommodating the micro reactor in the container under a heated atmosphere.
- 6. (Previously Presented) The reformer according to claim 1, further comprising:

heating means for heating the micro reactor for a reaction in the micro reactor and for heating an atmosphere in the container for exhausting the atmosphere when the micro reactor is accommodated in the container.

- 7. (Previously Presented) The reformer according to claim 5, wherein a temperature to which the atmosphere is heated is higher than a temperature at which the fluid undergoes a reaction in the micro reactor.
- 8. (Original) The reformer according to claim 1, wherein the micro reactor comprises a reactor which changes the fluid from a liquid phase to a gas phase.
- 9. (Original) The reformer according to claim 1, wherein the micro reactor comprises a reforming reactor which produces hydrogen from the fluid.

- 10. (Original) The reformer according to claim 1, wherein the micro reactor comprises a reforming reactor which reforms carbon monoxide in the fluid into carbon dioxide.
- 11. (Previously Presented) The reformer according to claim 1, further comprising temperature measurement means for measuring a temperature of the micro reactor.

Claims 12-22 (Canceled).

5

10

- 23. (Currently Amended) A reformer comprising:
- a micro reactor comprising a flow path for a fluid;
- a sealed container which accommodates the micro reactor and keeps an atmosphere on a periphery of the micro reactor at a pressure of not more than 1 Pa while the reformer is operated;
- an inlet pipe and an outlet pipe which are connected to the flow path of the micro reactor, and which extend outward from the container and are sealed to the container; and

adsorption means for adsorbing a medium which is present inside the container and which propagates heat.

24. (Original) The reformer according to claim 23, wherein the adsorption means comprises a polyimide-based material.

- 25. (Original) The reformer according to claim 23, wherein the adsorption means comprises a porous film.
- 26. (Previously Presented) The reformer according to claim 23, wherein the adsorption means comprises a surface coated with a material which physically adsorbs water or oxygen.
- 27. (Previously Presented) The reformer according to claim 23, wherein the adsorption means comprises a surface coated with a material which chemically adsorbs water or oxygen.

Claims 28-31 (Canceled).